

IN THE CLAIMS:

Please amend the claims as follows:

1. (Original) A method for use in processing data packets, comprising:

marking a plurality of data packets in a data stream with a respective first time stamp indicative of a time at which the data packet enters a region selected from a group consisting of the node, a bounded region of the node, and an unbounded region of the node, the first time stamp comprising a first number of bits;

inserting a plurality of marker packets into the data stream at time intervals, each marker packet comprising a respective second time stamp indicative of the time at which the marker packet enters a region selected from a group consisting of the node, a bounded region of the node, and an unbounded region of the node, the second time stamp comprising a second number of bits, the second number of bits being greater than the first number of bits, the time intervals comprising time periods selected from a group consisting of substantially equal to a maximum allowed time and lower than the maximum allowed time, the marker packet further comprising a plurality of error correction bits;

calculating for at least one data packet an estimation of an age of the data packet based on a current system time, the respective first time stamp, and the respective second time stamp of the last marker packet that was inserted into the data stream before the data packet, the calculation of the age of the data packet obtained by the following equation:

$$T_c - T_m \Big|_{N\text{-bit subtraction}} + T_m - T_{stamp} \Big|_{n\text{-bit subtraction}}$$

where T_c is the current system time, T_m is the respective second time stamp, T_{stamp} is the respective first time stamp, N corresponds to the second number of bits, and n corresponds to the first number of bits;

discarding the data packet if the calculated age is equal to or exceeds a maximum allowed time; and

allowing the data packet if the calculated age is lower than a maximum allowed time.

2. (Canceled)

3. (Currently Amended) ~~The method of Claim 2, further comprising~~ A method for use in processing data packets, comprising:

inserting a plurality of marker packets into a data stream at time intervals, each marker packet comprising a respective first time stamp indicative of the time the marker packet is inserted;

calculating for at least one data packet an estimate of an age of the data packet based on a current system time and the respective first time stamp of the last marker packet that was inserted into the data stream before the data packet; and

marking a plurality of data packets in the data stream with a respective second time stamp indicative of a time at which the data packet enters a node; the each first time stamp having a first number of bits and greater number of bits than the each second time stamp having a second number of bits, the first number being greater than the second number; wherein calculating for at least one data packet the estimate of the age of the data packet further comprises calculating the estimate of the age of the data packet based on the current system time, the respective first time stamp, and the respective second time stamp.

4. (Currently Amended) ~~The method of Claim 2~~ Claim 3, further comprising discarding the data packet if the calculated estimate of the age is equal to or exceeds a maximum allowed time.

5. (Currently Amended) ~~The method of Claim 2~~ Claim 3, further comprising allowing the data packet if the calculated estimate of the age is lower than a maximum allowed time.

6. (Currently Amended) ~~The method of Claim 2~~ Claim 3, wherein the respective second time stamp indicative of a time at which the data packet enters the node is the time at which the data packet enters a region selected from a group consisting of the node, a bounded region of the node, and an unbounded region of the node.

7. (Currently Amended) The method of ~~Claim 2~~ Claim 3, wherein the respective first time stamp indicative of the time the marker packet is inserted is the time at which the marker packet enters a region selected from a group consisting of the node, a bounded region of the node, and an unbounded region of the node.

8. (Currently Amended) The method of ~~Claim 2~~ Claim 3, wherein calculating the estimate of the age of the data packet further comprises:

calculating a first difference between the current system time and the respective first time stamp;

calculating a second difference between the respective ~~first~~ first time stamp and the respective second time stamp; and

adding the first difference and the second difference.

9. (Currently Amended) The method of ~~Claim 2~~ Claim 3, wherein the time interval comprises an interval of time substantially equal to a maximum allowed time.

10. (Currently Amended) The method of ~~Claim 2~~ Claim 3, wherein the time interval comprises an interval of time less than a maximum allowed time.

11. (Currently Amended) The method of ~~Claim 2~~ Claim 3, wherein the marker packet further comprises a plurality of error correction bits.

12. (Canceled)

13. (Currently Amended) ~~The system of Claim 12, the processor further operable to:~~ A system for processing data packets, comprising:

a node operable to receive a data stream; and

a processor associated with the node and operable to:

insert a plurality of marker packets into the data stream at time intervals, each marker packet comprising a respective first time stamp indicative of the time the marker packet is inserted;

calculate for at least one data packet an estimate of an age of the data packet based on a current system time and the respective first time stamp of the last marker packet that was inserted into the data stream before the data packet;

mark a plurality of data packets in a data stream with a respective second time stamp indicative of a time at which the data packet enters a node; the each first time stamp having a first number of bits and greater number of bits than the each second time stamp having a second number of bits, the first number being greater than the second number; and

calculate the estimate of the age of the data packet based on the current system time, the respective first time stamp, and the respective second time stamp.

14. (Currently Amended) ~~The system of Claim 12~~ Claim 13, the processor further operable to discard the data packet if the calculated estimate of the age is equal to or exceeds a maximum allowed time.

15. (Currently Amended) ~~The system of Claim 12~~ Claim 13, the processor further operable to allow the data packet if the calculated estimate of the age is lower than a maximum allowed time.

16. (Currently Amended) ~~The system of Claim 12~~ Claim 13, wherein the respective second time stamp indicative of a time at which the data packet enters the node is the time at which the data packet enters a region selected from a group consisting of the node, a bounded region of the node, and an unbounded region of the node.

17. (Currently Amended) The system of ~~Claim 12~~ Claim 13, wherein the respective first time stamp indicative of the time the marker packet is inserted is the time at which the marker packet enters a region selected from a group consisting of the node, a bounded region of the node, and an unbounded region of the node.

18. (Currently Amended) The system of ~~Claim 12~~ Claim 13, wherein the processor is further operable to calculate the estimate of the age of the data packet by:

calculating a first difference between the current system time and the respective first time stamp;

calculating a second difference between the respective ~~first~~ first time stamp and the respective second time stamp; and

adding the first difference and the second difference.

19. (Currently Amended) The system of ~~Claim 12~~ Claim 13, wherein the time interval comprises an interval of time substantially equal to a maximum allowed time.

20. (Currently Amended) The system of ~~Claim 12~~ Claim 13, wherein the time interval comprises an interval of time less than a maximum allowed time.

21. (Currently Amended) The system of ~~Claim 12~~ Claim 13, wherein the marker packet further comprises a plurality of error correction bits.

22. (Canceled)

23. (Currently Amended) ~~The logic of Claim 22, the logic further operable to:~~ A logic for processing data packets, the logic embodied in a medium and operable to:

insert a plurality of marker packets into a data stream at time intervals, each marker packet comprising a respective first time stamp indicative of the time the marker packet is inserted;

calculate for at least one data packet an estimate of an age of the data packet based on a current system time and the respective first time stamp of the last marker packet that was inserted into the data stream before the data packet;

mark a plurality of data packets in a data stream with a respective second time stamp indicative of a time at which the data packet enters a node; the each first time stamp having a first number of bits and ~~greater number of bits than the each~~ second time stamp having a second number of bits, the first number being greater than the second number; and

calculate the estimate of the age of the data packet based on the current system time, the respective time stamp, and the respective second time stamp.

24. (Currently Amended) The logic of ~~Claim 22~~ Claim 23, the logic further operable to discard the data packet if the calculated estimate of the age is equal to or exceeds a maximum allowed time.

25. (Currently Amended) The logic of ~~Claim 22~~ Claim 23, the logic further operable to allow the data packet if the calculated estimate of the age is lower than a maximum allowed time.

26. (Currently Amended) The logic of ~~Claim 22~~ Claim 23, wherein the respective second time stamp indicative of a time at which the data packet enters the node is the time at which the data packet enters a region selected from a group consisting of the node, a bounded region of the node, and an unbounded region of the node.

27. (Currently Amended) The logic of ~~Claim 22~~ Claim 23, wherein the respective first time stamp indicative of the time the marker packet is inserted is the time at which the

marker packet enters a region selected from a group consisting of the node, a bounded region of the node, and an unbounded region of the node.

28. (Currently Amended) The logic of ~~Claim 22~~ Claim 23, the logic further operable to calculate the estimate of the age of the data packet by:

calculating a first difference between the current system time and the respective first time stamp;

calculating a second difference between the respective ~~first~~ first time stamp and the respective second time stamp; and

adding the first difference and the second difference.

29. (Currently Amended) The logic of ~~Claim 22~~ Claim 23, wherein the time interval comprises an interval of time substantially equal to a maximum allowed time.

30. (Currently Amended) The logic of ~~Claim 22~~ Claim 23, wherein the time interval comprises an interval of time less than a maximum allowed time.

31. (Currently Amended) The logic of ~~Claim 22~~ Claim 23, wherein the marker packet further comprises a plurality of error correction bits.

32. (Currently Amended) A system for use in processing data packets, comprising:

means for inserting a plurality of marker packets into the data stream at time intervals, each marker packet comprising a respective first time stamp indicative of the time the marker packet is inserted; and

means for calculating for at least one data packet an estimate of an age of the data packet based on a current system time and the respective first time stamp of the last marker packet that was inserted into the data stream before the data packet; and

means for marking a plurality of data packets in the data stream with a respective second time stamp indicative of a time at which the data packet enters a node, each first time stamp having a first number of bits and each second time stamp having a second number of bits, the first number being greater than the second number, wherein calculating for at least one data packet the estimate of the age of the data packet further comprises calculating the estimate of the age of the data packet based on the current system time, the respective first time stamp, and the respective second time stamp.